IN THE CLAIMS

Please enter the following amendments to the claims. The claims are believed to introduce no new matter.

1. (Original) A method for implementing high availability in a fibre channel switch in a storage area network, the method comprising:

identifying a message at a first application running on an active supervisor in a fibre channel switch;

determining high availability characteristics associated with the message, wherein high availability characteristics provide information for synchronizing a second application running on a standby supervisor in the fibre channel switch with the first application;

providing the message to the second application running on the standby supervisor when high availability characteristics indicate that the message should be mirrored.

2. (Original) The method of claim 1, further comprising determining subscriber characteristics associated with the message, wherein subscriber characteristics provide information for determining which applications running on the active supervisor have subscribed to receive the message.

3. (Original) The method of claim 2, further comprising providing the message to a plurality of subscribers running on the active supervisor.

4. (Original) The method of claim 3, wherein providing the message to the plurality of subscribers comprises copying the message to a first supervisor shared buffer.

5. (Original) The method of claim 4, wherein providing the message to the plurality of subscribers comprises providing the subscribers with a reference to the message in the first supervisor shared buffer.

6. (Original) The method of claim 3, further comprising providing the message to a plurality of subscribers running on the standby supervisor.

7. (Original) The method of claim 6, wherein providing the message to the plurality of subscribers comprising copying the message to a second supervisor shared buffer.

8. (Original) The method of claim 7, wherein the message is copied to the second supervisor from the first supervisor asynchronously.

9. (Original) The method of claim 8, wherein an acknowledgement to the message is sent by the first application before the message is copied to the second supervisor.

PAGE 4/9 * RCVD AT 5/6/2005 5:28:21 PM [Eastern Daylight Time] * SVR:USPTO-EFXRF-1/4 * DNIS:8729306 * CSID:5106630920 * DURATION (mm-ss):02-34

10. (Currently Amended) The method of claim ~~6~~10, wherein providing the message to the plurality of subscribers running on the standby supervisor comprises providing the subscribers with a reference to the message in the second supervisor shared buffer.

11. (Original) The method of claim 1, wherein high availability characteristics relate to mirroring, persistence, and logging.

12. (Original) The method of claim 11, further comprising maintaining a first supervisor transaction log if high availability characteristics indicate that the message should be logged.

13. (Original) A fibre channel switch, comprising:

a fibre channel line card coupled to an external fibre channel network entity;

a first supervisor coupled to the fibre channel line card through a backplane;

a second supervisor coupled to the first supervisor;

wherein the first supervisor is configured to identify a message from the external fibre channel network entity that alters the state of the first supervisor and send an acknowledgement to the external fibre channel network entity before the message is passed to the second supervisor.

14. (Original) The fibre channel switch of claim 13, wherein the first supervisor is further configured to send an advance notification associated with the message to the second supervisor before passing the message to the second supervisor.

15. (Original) The fibre channel switch of claim 14, wherein the advance notification is a sequence number associated with the message.

16. (Original) The fibre channel switch of claim 15, wherein the advance notification is transmitted synchronously before an acknowledgement is sent to the external fibre channel network entity.

17. (Original) The fibre channel switch of claim 16, wherein the message is transmitted asynchronously after the message is acknowledged.

18. (Original) The fibre channel switch of claim 17, wherein the second supervisor is configured to use the advance notification to verify the consistency of its internal state.

19. (Original) The fibre channel switch of claim 14, wherein the first supervisor comprises a first pending transaction buffer.

20. (Original) The fibre channel switch of claim 19, wherein the message is copied into the first pending transaction buffer and a reference to the message is provided to a first plurality of applications running on the first supervisor.

PAGE 5/9 * RCVD AT 5/6/2005 5:28:21 PM [Eastern Daylight Time] * SVR:USPTO-EFXRF-1/4 * DNIS:8729306 * CSID:5106630920 * DURATION (mm-ss):02-34

21. (Original) The fibre channel switch of claim 20, wherein the first plurality of applications running on the first supervisor are subscribers to the message.

22. (Original) The fibre channel switch of claim 20, wherein the second supervisor comprises a second pending transaction buffer.

23. (Original) The fibre channel switch of claim 22, wherein the message is copied into the second pending transaction buffer and a reference to the message is provided to a second plurality of applications running on the second supervisor.

24. (Original) The fibre channel switch of claim 23, wherein the second plurality of applications running on the second supervisor are subscribers to the message.

25. (Original) The fibre channel switch of claim 23, wherein the first supervisor is an active supervisor and the second supervisor is a standby supervisor.

26. (Original) The fibre channel switch of claim 23, wherein the message is copied into the second pending transaction buffer if high availability characteristics of the message indicate that the message should be mirrored.

27. (Original) A switch in a storage area network, the switch comprising:

means for identifying a message at a first application running on an active supervisor in a fibre channel switch;

means for determining high availability characteristics associated with the message, wherein high availability characteristics provide information for synchronizing a second application running on a standby supervisor in the fibre channel switch with the first application;

means for providing the message to the second application running on the standby supervisor when high availability characteristics indicate that the message should be mirrored.

28. (Original) The switch of claim 27, further comprising means for determining subscriber characteristics associated with the message, wherein subscriber characteristics provide information for determining which applications running on the active supervisor have subscribed to receive the message.

29. (Original) The switch of claim 28, further comprising means for providing the message to a plurality of subscribers running on the active supervisor.

30. (Original) The switch of claim 29, wherein providing the message to the plurality of subscribers comprises copying the message to a first supervisor shared buffer.

31. (Original) The switch of claim 30, wherein providing the message to the plurality of subscribers comprises providing the subscribers with a reference to the message in the first supervisor shared buffer.

PAGE 6/9 * RCVD AT 5/6/2005 5:28:21 PM [Eastern Daylight Time] * SVR:USPTO-EFXRF-1/4 * DNIS:8729306 * CSID:5106630920 * DURATION (mm-ss):02-34

32. (Original) The switch of claim 29, further comprising means for providing the message to a plurality of subscribers running on the standby supervisor.

33. (Original) The switch of claim 32, wherein providing the message to the plurality of subscribers comprising copying the message to a second supervisor shared buffer.

34. (Original) The switch of claim 33, wherein the message is copied to the second supervisor from the first supervisor asynchronously.

35. (Original) The switch of claim 34, wherein an acknowledgement to the message is sent by the first application before the message is copied to the second supervisor.

PAGE 7/9 * RCVD AT 5/6/2005 5:28:21 PM [Eastern Daylight Time] * SVR:USPTO-EFXRF-1/4 * DNIS:8729306 * CSID:5106630920 * DURATION (mm-ss):02-34